Human Capital Sustainability Leadership to Promote Sustainable Development and Healthy Organizations: A New Scale

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Abstract: Human resource management that aims to promote employee wellbeing calls for a new style of leadership. Such a strategy focuses on fostering flourishing and resilient workers to build up thriving businesses and robust and sustainable organizations. In this framework, we developed a new integrated construct of human capital sustainability leadership, and a scale to assess it. This leadership style has its roots in the existing definition of the term but aims to achieve higher integration of different functions and of the four dimensions of leadership, including ethical, sustainable, mindful and servant leadership. In this study, we analyze the psychometric properties of the new scale for assessing human capital sustainability leadership for Italian workers. The results of the exploratory factor analysis reveal a factor structure with the four dimensions that have good reliability and validity. The confirmatory factor analysis confirms this four-dimensional structure, which is integrated into the construct of human capital sustainability leadership as a single second-order factor.

Keywords: human capital sustainability leadership scale; sustainable development; sustainable wellbeing; healthy organizations

1. Introduction

The term “sustainability” is understood in the literature in different ways, so it is a multi-vocal concept with various meanings. In some cases, it could seem ambiguous; for this reason, it is useful to clarify its evolution and perspectives.

The interest in sustainability and sustainable development is increasing in the 21st century due to new global economies characterized by acceleration and complexity, an emerging awareness about environmental issues, and the use and exploitation of resources and the related risks for future generations.

The word sustainable, originating from the Latin “sub-tenère”, refers to something that can be maintained and upheld, and figuratively pertains to something tolerable that can be stated with certainty. In politics, technology, economics and ecology, the term sustainable traditionally denotes the ability to achieve current aims without endangering future ones. Since the Brundtland Report [1], the traditional perspective of sustainable development has introduced the defense of future generations’ right to enjoy the environment and natural resources as much as the current generation. The economy, equity, and ecology (3Es) rule supports this perspective [2]. Furthermore, new contributions have enriched the concept by broadening its horizons. For example, the term sustainability has been interpreted as involving not only matters concerning the economic, social and ecological environment, but also psychological issues about the quality of human life [3]. Among the...
17 sustainable development goals set by the United Nations [4], good health and wellbeing represent fundamental aims to ensure the prosperity of all. Thus, the psychology of sustainability [3,5,6] has emerged and gradually acquired the connotation of paying attention to “positive sustainability”. Traditionally, the verb sustain means to maintain something as it is in the present and forward it to the future without losing any qualitatively or quantitatively inherent characteristics and properties. From this perspective, the current generation attain realization over resources without jeopardizing possible future uses of those resources, therefore ensuring their fair use. At any rate, before the positive shift [3,5,7], the literature only had the perspective of not damaging resources. On the contrary, the new perspective also demands paying attention to both respecting and regenerating resources [3]. The traditional perspective is based on renewable resources and the prevention of polluting processes and materials. The new perspective is also based on renewable resources, as well as purifying and oxygenating processes for people and the environment. The traditional view focuses on using non-toxic materials and processes, as well as maintenance, processing, dismantling, demolition, disposal and recycling. On the other hand, the innovative standpoint emphasizes accountability for the enhancement of health/wellbeing and renewing/upgrading resources through “re-wellbeing, up-wellbeing and crea(te)-wellbeing” as a fundamental sustainable development goal for positive, healthy organizations [3]. From a positive, healthy organizations perspective [5], the shift from illness to positive health of individuals and organizations underlines the importance of promoting the individuals’ and organizations’ resources, and subsequently building their strengths. This innovative approach goes beyond the ecological and socio-economic context by focusing on sustaining well-being and improving the quality of life of individuals, groups, and organizations [3].

The psychology of sustainability is important in work and organizational psychology because the discipline aims to promote humane and productive organizations. The recent economic crisis has threatened the quality of working life; for this reason, the issues of sustainability and sustainable wellbeing of workers has become more critical [6]. These authors question the model of a “happy and productive worker”, showing empirically that different combinations may appear, as follows: “happy and productive worker” or “unhappy and unproductive worker”, as well as “unhappy and productive worker” and “happy and unproductive worker” (p. 11). These results open a series of reflections about sustainability in organizations, asking if researchers and practitioners can consider sustainable working conditions as highly productive, associated with a low level of wellbeing/job dissatisfaction, or as a high level of wellbeing/job satisfaction, associated with low productivity [6]. More research and multi-level analyses are necessary to consider variables at the level of operative units or organizations to further clarify both sustainable wellbeing and the sustainability of organizations that promote a virtuous circle, in order to promote the wellbeing of workers and the success of the organizations [6]. Positive healthy organizations in a preventive perspective are centered on the promotion of growth, and the procurement of optimal results and positive experiences, and do not center on deficiency, failure, and the avoidance of risks for health and safety [5]. Healthy organizations try to anticipate problems and simultaneously promote well-being and the enhancement of resources at the individual, organizational and inter-organizational level [5]. Healthy organizations that try to obtain the right balance between their specific conditions, field and culture underline the increasing importance of well-being and sustainability [5]. In this scenario, it is important to consider new forms of leadership to promote sustainability in organizations. Until recently, the construct of sustainable leadership had been developed from the traditional perspective of shared responsibility, which is to avoid unduly depleting resources by taking care not to cause any damage from economic, social and environmental standpoints [8,9]. This definition was based on seven principles [8,9], as follows: sustainable leadership creates and preserves continuous learning, secures success over time, sustains the leadership of others, addresses issues of social justice, develops rather than depletes human and material resources, develops environmental diversity and capacity, and is actively engaged in the environment.
Leadership is a concept that is strongly related to the topic of human resource development [10–13]. Organizations can progress and create businesses in a particularly adaptive manner by focusing on their human resources; considering their growth, development and wellbeing; and protecting the relationship between leaders and followers [7,14,15]. This approach can promote profitable and advantageous development processes for both individuals and organizations [12,13]. To effectively respond to the challenges of real and sustainable human resource development from a primary prevention perspective [7,16–18], our study introduces a new integrated leadership style for the sustainability of human capital and organizations. The focus is on the flourishing of individuals and organizations, as well as the principles of psychology of sustainability and sustainable development to support healthy individuals in healthy businesses [3,5,6,19–21]. In this framework, we have developed a new integrated concept, called human capital sustainability leadership, and the scale to assess it.

This new construct goes beyond the traditional definition of sustainable leadership by positioning itself in the positive shift, as well as integrating other current leadership aspects that are important for the development and functioning of human capital from a psychological, sustainable perspective. The new human capital sustainability leadership focuses on healthy people as flourishing and resilient workers, and on healthy organizations as thriving and successful environments characterized by the positive circle of long-term wellbeing and performance. This new human capital sustainability leadership construct integrates our definition of sustainability leadership with ethical leadership [22], mindful leadership [23,24] and servant leadership [25,26]. Briefly, our sustainability leadership construct focuses on both the use of vigilant decision-making processes (i.e., using decision-making expertise that leave out the superfluous by centering resources on crucial aspects of work), and the development and sustainability of human resources by creating continuous learning conditions that support and facilitate employees’ personal and career growth. Furthermore, our sustainability leadership concept integrates other aspects that are essential for the prosperity and optimal functioning of human resources from a long-term perspective. Ethical leadership aims to engender fair and just aims, empower an organization’s members [22], create consistency of actions with espoused values, use behavior to communicate or enforce ethical standards, fair decisions and rewards, kindness, compassion and concern for others [27]. Mindful leadership refers to a style based on paying attention to the present moment, and recognizing personal feelings and emotions and keeping them under control, especially under stress. Mindfulness means awareness of an individual’s own presence at a given time and its impact on other people [23,24]. Servant leadership considers, as its main objective [25], the growth of the followers for their personal interest (not for the interest of the organization or the leader) [25], recognizing their needs and helping them on the basis of a moral responsibility towards them [28]. The new human capital sustainability leadership is rooted in all of these perspectives, recognizing them as different facets of the same concept, going beyond the existing definition of sustainable leadership by integrating and recomposing the core sides to broaden and enhance the previous construct. In the literature, the four kinds of leadership included in our model (ethical, sustainable, mindful and servant leadership) are considered and detected separately, as they are orthogonal dimensions with little or no variance in common. Our contribution to the investigation in the field goes in the direction of exploring the possibility of unifying these four kinds of leadership in one second-order factor that can get them together on the basis of common variance.

Our study aims to analyze the psychometric properties of the new construct of the Human Capital Sustainability Leadership Scale for Italian workers in terms of a higher-order construct, composed of four specific types of leadership (ethical, sustainable, mindful and servant leadership). Defining a higher-order construct allows the specific constructs to be detected at the same time using a more economical procedure that represents a valid and reliable measure of the core construct. This new measure permits us to evaluate human capital sustainability leadership from the leader’s point of view. On the basis of the theoretical construct and the formulation of items, we hypothesize that four factors will emerge that converge in the higher order factor human capital sustainability leadership.
2. Materials and Methods

2.1. Participants

The participants were 207 leaders from public and private health and care organizations in the Tuscany region (females = 66.67%, males = 33.33%; mean age = 41.40 years, SD = 11.97). The exploratory factor analysis involved these 207 participants. The second-order confirmatory factor analysis (CFA) involved 274 Italian leaders from different public and private organizations in the Tuscany region (females = 64.25%, males = 35.75%; mean age = 42.53 years, SD = 12.31).

2.2. Measures

The new integrated leadership scale is composed of 16 items on a Likert scale with five responses (from 1 = none to 5 = very much) (see Appendix A). The following are some examples of the items: “I act by giving an example of doing tasks in an ethically correct manner” (ethical leadership); “I create sustainable learning conditions that I take care to preserve” (sustainable leadership); “I put myself in the shoes of my co-workers when they are doing tasks” (mindful leadership); and “I encourage my collaborators when I realize that they encounter difficulties” (servant leadership). The scale’s factor structure, reliability and validity were analyzed in this study, and are presented in the results section.

The Workplace Relational Civility Scale (WRCS) [29] is a self-report mirror instrument that consists of 26 items to assess relational civility in the workplace. The WRCS has three dimensions: relational readiness (RR), relational culture (RCu) and relational decency (RD) at work. The sum of these dimensions gives an overall score in workplace relational civility for each part of the WRCS (Part A and Part B) and a total score. Part A concerns the analysis of an individual’s self-perception regarding a particular issue (e.g., “I was able to express my values and beliefs calmly to others”). Part B involves the analysis of an individual’s perception of others regarding the same issue (e.g., “Others were able to express their values and beliefs calmly to me”). The participants in this study were asked to describe their general relationship with others over the past three months and then to describe their perception of the others’ general relationship with them over the same period. The response format was a Likert scale with five responses (1 = not at all, 2 = a little, 3 = somewhat, 4 = much, 5 = a great deal). Cronbach’s alpha coefficients for the three dimensions of Part A were as follows: Factor 1A = RR (α = 0.83), Factor 2A = RCu (α = 0.76) and Factor 3A = RD (α = 0.75). The factors for Part B were as follows: Factor 1B = RR (α = 0.86), Factor 2B = RCu (α = 0.88) and Factor 3B = RD (α = 0.85). Cronbach’s alpha coefficients for the total scores for Part A and Part B were α = 0.87 and α = 0.92, respectively. The WRCS showed positive and statistically significant correlations with the following measures, attesting to a good concurrent validity: The Organizational Citizenship Behavior Scale [30], the Prosocial Organizational Behaviors Scale [31], the Flourishing Scale [32], the Positive Relational Management Scale [19], the Intrapreneurial Self-Capital Scale [33] and the Psychological Self-Capital Questionnaire [34].

The Flourishing Scale (FS) [32] in the Italian version [35] was used to evaluate flourishing as an additional aspect of eudaimonic wellbeing. The FS consists of eight items with response options on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The following are several examples of the items: “My social relationships are supportive and rewarding”; “I lead a purposeful and meaningful life”; and “I am optimistic about my future”. The FS showed a unidimensional structure with good reliability (α = 0.88). The positive and statistically significant correlations of the Italian version of the FS with the Meaningful Life Measure [36], the Authenticity Scale [37], the Satisfaction with Life Scale [38], the Positive Affect (PA) of the Positive Affect and Negative Affect Scale (PANAS) [39] and the inverse with the Negative Affect (NA) of the PANAS [39] underlined good concurrent validity.

The High Entrepreneurship, Leadership, Professionalism Questionnaire (HELP-Q) [40] is a short, integrated scale that assesses the principal dimensions of entrepreneurship (E), leadership (L) and professionalism (P) in terms of the areas of motivations, intentions and efficacies. This scale consists of nine items, three for each area, on a 5-point Likert-type scale (1 = not at all, 2 = a little, 3 = somewhat,
4 = much, 5 = a great deal) that helps build a profile of HELP in relation to the three areas. The following are examples of the items: “To what extent is it important for me to look for new ideas on how to make a profit for entrepreneurship?” (E); “To what extent is it important for me to become a leader or a manager?” (L); and “To what extent is it important for me to excel in my chosen area of study/work?” (P). Cronbach’s alpha coefficients were 0.92 for (E), 0.92 for (L), 0.90 for (P) and 0.77 for the total score. The HELP-Q demonstrated good concurrent validity, showing positive and statistically significant correlations with the Intrapreneurial Self-Capital Scale [33], the PSQ [34], the Proactivity Scale [41] and the Rosenberg Self-Esteem Scale [42].

2.3. Procedure

The questionnaires were administered in groups by a trained psychologist and were in accordance with the Italian Privacy Law. The order of administration was counterbalanced, changing the sequence of administration of the questionnaires to control for the effects of presentation order.

2.4. Data Analysis

The factor structure of the Human Capital Sustainability Leadership Scale was examined through exploratory factor analysis (EFA) (using principal axis factoring with Promax rotation). The inter-correlations between the individuated factors were calculated. The factor structure was also analyzed through a second-order CFA, using a different group of participants. The model adequacy was examined by calculating not only the $\chi^2$ value (a statistic that is influenced by larger samples) but also other fit indices, such as the ratio between the $\chi^2$ value and degrees of freedom ($\chi^2/df$). Ratio values between 1 and 3 are considered to indicate good quality. Comparative fit index [43] and non-normed fit index (NNFI, [44]) were also used. Values greater than 0.90 indicate good adequacy of the model [43]. The Root Mean Square Error of Approximation (RMSEA) and the Standardised Root Mean Residual SRMR were also calculated. Indices that are less than 0.08 indicate relatively good fit [45]. Cronbach’s alpha coefficients were calculated to determine the internal consistency of each subscale and the total scale.

Pearson’s correlation coefficients between the new leadership scale, the WRCS, the FS and the HELP-Q were calculated to assess the concurrent validity of the Human Capital Sustainability Leadership Scale.

3. Results

The factor structure of the new leadership scale was examined through EFA (using principal axis factoring with Promax rotation). The results revealed a factor structure with four dimensions that explained 66.71% of the variance (Table 1).

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Ethical Leadership</th>
<th>Sustainable Leadership</th>
<th>Mindful Leadership</th>
<th>Servant Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td>0.85</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>0.84</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>0.56</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td>0.42</td>
</tr>
</tbody>
</table>

Note: Factor loadings < 0.40 are reported.
Table 2. Inter-correlations among the four factors of the Human Capital Sustainability Leadership Scale.

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethical leadership</td>
<td>-</td>
<td>0.55 **</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2. Sustainable leadership</td>
<td></td>
<td>-</td>
<td>0.60 **</td>
<td>-</td>
</tr>
<tr>
<td>3. Mindful leadership</td>
<td>0.50 **</td>
<td>0.52 **</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4. Servant leadership</td>
<td>0.58 **</td>
<td>0.45 **</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 207; **p < 0.01.

A CFA with a different sample was also conducted. To test the construct validity of the measuring instrument, we hypothesized that Human Capital Sustainability Leadership Scale scores could be adequately represented by a hierarchical factorial structure, that is, the four first-order factors could be better explained by a single broader dimension of leadership. For this reason, we tested a single second-order factor with the four first-order factors (see Figure 1). The indices reported in Table 3 show a good fit of the model to the data.

Figure 1. Second-order confirmatory factor analysis model of the Human Capital Sustainability Leadership Scale (HCSLS) structure.
Table 3. Confirmatory factor analysis: Goodness of fit.

<table>
<thead>
<tr>
<th>Human Capital Sustainability Leadership Scale</th>
<th>$\chi^2$/dgl</th>
<th>NNFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.85</td>
<td>0.91</td>
<td>0.93</td>
<td>0.08</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Note. $N = 274$.

Regarding the reliability of the scale, the Cronbach’s alpha coefficients are reported in Table 4.

Table 4. Reliability of the Human Capital Sustainability Leadership Scale.

<table>
<thead>
<tr>
<th></th>
<th>Ethical Leadership</th>
<th>Sustainable Leadership</th>
<th>Mindful Leadership</th>
<th>Servant Leadership</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
<td>207 0.84</td>
<td>274 0.80</td>
<td>0.84</td>
<td>0.84</td>
<td>0.82</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>274 0.80</td>
<td>0.86</td>
<td>0.86</td>
<td>0.86</td>
<td>0.91</td>
</tr>
</tbody>
</table>

With regard to concurrent validity, the correlations between the Human Capital Sustainability Leadership Scale and the WRCS and FS are reported in Table 5, and the correlations between the leadership scale and the HELP-Q are reported in Table 6.

Table 5. Correlations of the leadership scale with the Workplace Relational Civility Scale (WRCS) and the Flourishing Scale (FS).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethical leadership</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sustainable leadership</td>
<td>0.55 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mindful leadership</td>
<td>0.50 **</td>
<td>0.60 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Servant leadership</td>
<td>0.58 **</td>
<td>0.52 **</td>
<td>0.45 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Leadership scale total</td>
<td>0.82 **</td>
<td>0.83 **</td>
<td>0.79 **</td>
<td>0.80 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. WRCS (Part A)</td>
<td>0.56 **</td>
<td>0.54 **</td>
<td>0.48 **</td>
<td>0.65 **</td>
<td>0.69 **</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. WRCS (Part B)</td>
<td>0.33 **</td>
<td>0.32 **</td>
<td>0.30 **</td>
<td>0.38 **</td>
<td>0.41 **</td>
<td>0.60 **</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. FS</td>
<td>0.41 **</td>
<td>0.46 **</td>
<td>0.31 **</td>
<td>0.52 **</td>
<td>0.53 **</td>
<td>0.57 **</td>
<td>0.59 **</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. $N = 207$; ** $p < 0.01$.

Table 6. Correlations between the leadership scale and the High Entrepreneurship, Leadership, Professionalism Questionnaire (HELP-Q).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethical leadership</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sustainable leadership</td>
<td>0.55 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mindful leadership</td>
<td>0.50 **</td>
<td>0.60 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Servant leadership</td>
<td>0.58 **</td>
<td>0.52 **</td>
<td>0.45 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Leadership scale total</td>
<td>0.82 **</td>
<td>0.83 **</td>
<td>0.79 **</td>
<td>0.80 **</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Entrepreneurship</td>
<td>0.24 **</td>
<td>0.44 **</td>
<td>0.45 **</td>
<td>0.34 **</td>
<td>0.45 **</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Leadership</td>
<td>0.30 **</td>
<td>0.40 **</td>
<td>0.38 **</td>
<td>0.34 **</td>
<td>0.44 **</td>
<td>0.85 **</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Professionalism</td>
<td>0.38 **</td>
<td>0.34 **</td>
<td>0.37 **</td>
<td>0.31 **</td>
<td>0.43 **</td>
<td>0.59 **</td>
<td>0.65 **</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. $N = 207$; ** $p < 0.01$.

4. Discussion

This study aimed to analyze the psychometric properties of a new measure for assessing human capital sustainability leadership among Italian workers. The developed measure proved to be a reliable and valid tool for assessing this new kind of leadership from the leader’s point of view.
Regarding its dimensionality, the results of the EFA showed a structure with four dimensions: Ethical, sustainable, mindful and servant leadership. Moreover, the second-order CFA indicated that the four dimensions identified through EFA converged in the higher-order construct of human capital sustainability leadership, showing satisfactory statistic fit indices. The scale as a total score, and the four factors that were verified through the calculation of Cronbach’s alpha coefficients, showed good reliability. The correlations of the new Human Capital Sustainability Leadership Scale with workplace relational civility, flourishing, and the (E), (L) and (P) dimensions of the HELP-Q underlined an adequate concurrent validity of the instrument with regard to the effected measures. In particular, the positive relationships of Human Capital Sustainability Leadership Scale with Workplace Relational Civility Scale, for both Part A (me with others) and Part B (others with me) suggested that leaders who perceive higher human capital sustainability leadership feel both themselves committed to act with workplace relational civility and also perceive more relational civility towards themselves by others in the workplace. The positive relationships of the Human Capital Sustainability Leadership Scale and the Flourishing Scale suggested that this kind of leadership permitted the leaders to perceive themselves as flourishing in terms of social and psychological prosperity and well-being in important areas, such as in relationships, self-esteem, presence of purpose, and optimism. This psychological prosperity is an important starting point to be able to promote flourishing of other workers/collaborators. The positive relationships of the Human Capital Sustainability Leadership Scale with the Entrepreneurship Leadership Professionalism Questionnaire suggested that leaders with higher human capital sustainability leadership perceived themselves in the framework of the challenging 21st century, with these integral characteristics being part of their capacity to serve as a role model in their leadership.

Although the results of the present study appear promising, it is necessary to point out some limitations, particularly in relation to the characteristics of the participants. The participants were not representative of the national context because they were only from the Tuscany region. Future research could extend the study to include participants from different parts of Italy and from various industries and organizations, as well as to replicate the study in international contexts. Furthermore, there are issues that could be considered which are relative to potential social desirability and the impression of management effects. Future studies may include measures to detect these aspects, including self-deception, as exemplified by the Paulhus Self-Deception Scale [46].

Despite the above-mentioned limitations, the findings suggest that this new measure for assessing human capital sustainability leadership is a new core construct of leadership resources to be used in meeting the challenges of the 21st century. This leadership style focused on human capital sustainability that could favor a sustainable development of organizations. The focus on the promotion of resources and well-being at the individual and organizational level could contribute towards workers and organizations that are more productive and efficient. The human capital sustainable leadership style could enhance autonomy and self-actualization of workers, positive relationships and positive workplaces, thereby sustaining well-being for healthy individuals and healthy organizations [5]. This human capital sustainable leadership style could also promote a deeper enhancement of workers’ strengths and, as a result, their flourishing [3,5]. The construct of human capital sustainable leadership can be used in organizational contexts to facilitate strategic actions for building a more sustainable human environment, promote the sustainable development of human resources and organizations, support flourishing and resilient workers, and promote healthy organizations and healthy businesses [3,5,6,19].

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Appendix A. Items of Human Capital Sustainability Leadership

Ethical leadership

1. Being correct is important when we perform a task or a job.
2. I act by giving an example of doing tasks in an ethically correct manner.
3. I keep my promise to my collaborators.
4. I make decisions in an ethical manner.

Sustainable leadership

5. I create sustainable learning conditions that I take care to preserve.
6. I develop, rather than exhaust, the human resources that work with me.
7. I support my collaborators in their personal/career growth.
8. I leave out the superfluous by focusing the resources on the crucial aspects of work.

Mindful leadership

9. I put myself in the shoes of my collaborators when they are doing tasks.
10. I anticipate the requests of my collaborators.
11. I am aware of the strengths and the limitations of my collaborators.
12. I recognize the value of my self-control to my employees, even in stressful situations.

Servant leadership

13. In general, I show interest in the professional and personal lives of my collaborators.
14. I encourage my collaborators when I realize that they encounter difficulties.
15. I commit myself so my collaborators have all the information to work to the best.
16. I actively promote a positive group climate at work.

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